

DIVISION 1. - GENERAL PROVISIONS

Sec. 18-101. - Title.

This article shall be officially known as the "Post-Construction Stormwater Ordinance." It is referred to herein as "this ordinance," "these regulations," [or "this article."]

(Ord. No. 3764, § 1(101), 11-26-2007)

Sec. 18-102. - Authority.

The City of Charlotte and City of Charlotte Extra Jurisdictional Territory, referred to herein as "city," is authorized to adopt this article pursuant to state law, including but not limited to Article 14, Section 5 of the Constitution of North Carolina; G.S. 143-214.7 and rules promulgated by the Environmental Management Commission thereunder; Session Law 2006-246 (Senate Bill 1566), G.S. 160A-174, 160A-185, ~~160A-372 and 160A-459~~160D-804; 804.1 and 160D-925.

(Ord. No. 3764, § 1(102), 11-26-2007)

Sec. 18-103. - Findings.

It is hereby determined that:

- (1) Development and redevelopment alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, soil erosion, stream channel erosion, non-point source pollution, and sediment transport and deposition, as well as reduce groundwater recharge;
- (2) These changes in stormwater runoff contribute to increased quantities of water-borne pollutants and alterations in hydrology which are harmful to public health and safety as well as to the natural environment; and
- (3) These effects can be managed and minimized by applying proper design and well-planned controls to manage stormwater runoff from development and redevelopment.

Further, the Federal Water Pollution Control Act of 1972 ("Clean Water Act") and federal phase II stormwater rules promulgated under it, as well as rules of the state environmental management commission promulgated in response to federal phase II requirements, compel certain urbanized areas, including this jurisdiction, to adopt the minimum stormwater controls such as those included in this article.

Therefore, these water quality and quantity regulations are adopted to meet the requirements of state and federal law regarding control of stormwater runoff and discharge.

(Ord. No. 3764, § 1(103), 11-26-2007)

Sec. 18-104. - Purpose.

- (a) *General.* The purpose of this article is to protect, maintain and enhance the public health, safety, environment and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased post-construction stormwater runoff and non-point source pollution associated with development and redevelopment. It has been determined that proper management of construction-related and post-construction stormwater runoff will minimize damage to public and private property and infrastructure, safeguard the public health, safety, and general welfare, and protect water and aquatic resources.
- (b) *Specific.* This article seeks to meet its general purpose through the following specific objectives and means:

- (1) Establishing decision-making processes for development and redevelopment that protect the integrity of watersheds and preserve the health of water resources;
- (2) Minimizing changes to the pre-development hydrologic response for development and redevelopment in their post-construction state in accordance with the requirements of this article for the applicable design storm in order to reduce flooding, streambank erosion, and non-point and point source pollution, as well as to maintain the integrity of stream channels, aquatic habitats and healthy stream temperatures;
- (3) Establishing minimum post-construction stormwater management standards and design criteria for the regulation and control of stormwater runoff quantity and quality;
- (4) Establishing design and review criteria for the construction, function, and use of structural stormwater control facilities that may be used to meet the minimum post-construction stormwater management standards;
- (5) Establishing criteria for the use of better management and site design practices, such as the preservation of greenspace and other conservation areas;
- (6) Establishing provisions for the long-term responsibility for and maintenance of structural and nonstructural stormwater best management practices (BMPs) to ensure that they continue to function as designed, are maintained appropriately, and pose minimum risk to public safety; and
- (7) Establishing administrative procedures for the submission, review, approval and disapproval of stormwater management plans, for the inspection of approved projects, and to assure appropriate long-term maintenance.

(Ord. No. 3764, § 1(104), 11-26-2007)

Sec. 18-105. - Applicability and jurisdiction.

- (a) *General.* The requirements of this article shall apply to all development and redevelopment within the corporate limits of this city and its extraterritorial jurisdiction, unless one of the following exemptions applies as of July 1, 2008:
 - (1) Residential development and redevelopment, preliminary subdivision plan application or in the case of minor subdivisions, construction plan for required improvements, submitted and accepted for review;
 - (2) For nonresidential development and redevelopment, preliminary subdivision plan application submitted and accepted for review, provided that subdivision-wide water quality and quantity features required at the time of submittal are contained within the submittal and provided the plan is subsequently approved and all necessary easements are properly established;
 - (3) Zoning use application submitted and accepted for review for uses that do not require a building permit;
 - (4) Certificate of building code compliance issued by the proper governmental authority;
 - (5) Valid building permit issued pursuant to G.S. ~~153A-344~~160D-604 or G.S. ~~160A-385(b)(i)~~160D-102; 108(d); 603, so long as the permit remains valid, unexpired, and unrevoked;
 - (6) Common law vested right established (e.g., the substantial expenditure of resources (time, labor, money) based on a good faith reliance upon having received a valid governmental approval to proceed with a project); and/or
 - (7) A conditional zoning district (including those districts which previously were described variously as conditional district, conditional use district, parallel conditional district and parallel conditional use district) approved prior to the effective date of this article/ordinance, provided formal plan submission has been made and accepted for review either prior to five years from July 1, 2008 in the case of conditional zoning districts approved on or after November 15, 1999, or prior to two

years from July 1, 2008 in the case of conditional zoning districts approved prior to November 15, 1999, and provided such plans encompass either a minimum of 22.5 percent of the area of the project, or any phase of a project so long as such phase is part of a project that includes project-wide water quality requirements to achieve 85 percent TSS removal from developed areas. If no such formal plan submission occurs within the above-described five- or two-year time frames, the requirements of this article shall be applied to the project, except for total phosphorus removal, natural area and buffer requirements not in effect at the time of the approval of the conditional zoning district, all of which do not apply. Any changes to a conditional zoning district necessary to comply with the requirements of this article shall be made through administrative amendment and not through a rezoning.

- (b) *Exemptions.* The requirements of this article shall not apply within the corporate limits or in the extraterritorial jurisdiction with respect to the following types of development or redevelopment activities:
- (1) Residential development and redevelopment that cumulatively disturbs less than one acre and cumulatively creates less than 24 percent built upon area based on lot size or the lot is less than 20,000 square feet (lot must have been described by metes and bounds in a recorded deed prior to July 1, 2008 and can not be part of a larger development or redevelopment);
 - (2) Commercial and industrial development and redevelopment that cumulatively disturbs less than one acre and cumulatively creates less than 20,000 square feet of built upon area (built upon area includes gravel and other partially impervious materials);
 - (3) Redevelopment that disturbs less than 20,000 square feet, does not decrease existing stormwater controls and renovation and/or construction costs (excluding trade fixtures) do not exceed 100 percent of the tax value of the property; and
 - (4) Activities exempt from permit requirements of section 404 of the federal Clean Water Act, as specified in 40 CFR 232 (primarily, ongoing farming and forestry activities).
- (c) *No development or redevelopment until compliance and permit.* No development or redevelopment shall occur except in compliance with the provisions of this article or unless exempted. No development or redevelopment for which a stormwater management permit, here after referred to as permit, is required pursuant to this article shall occur except in compliance with the provisions, conditions, and limitations of said permit.
- (d) *Map.* The provisions of this article shall apply within the areas designated on the map titled "Post-Construction Ordinance Map of the City" (hereafter referred to as the "post-construction ordinance map"), which is adopted simultaneously herewith. The post-construction ordinance map and all explanatory matter contained thereon accompany and are hereby made a part of this article. The post-construction ordinance map shall be kept on file by the stormwater administrator or designee (hereinafter referred to as the "stormwater administrator") and shall be updated to take into account changes in the land area covered by this article and the geographic location of all structural BMPs permitted under this article. In the event of a dispute, the applicability of this article to a particular area of land or BMP shall be determined by appeal through the stormwater administrator

(Ord. No. 3764, § 1(105), 11-26-2007)

Sec. 18-106. - Design manual.

- (a) *Reference to design manual.* The stormwater administrator shall use the policy, criteria, and information, including technical specifications and standards, in the design manual as the basis for decisions about stormwater management permits and about the design, implementation and performance of structural and non-structural stormwater BMPs.

The design manual includes a list of acceptable stormwater treatment practices, including the specific design criteria for each stormwater practice. Stormwater treatment practices that are designed and constructed in accordance with these design and sizing criteria will be presumed to meet the

minimum water quality performance standards of this article and the phase II laws. Failure to construct stormwater treatment practices in accordance with these criteria may subject the violator to a civil penalty as described in division 7.

- (b) *Relationship of design manual to other laws and regulations.* If the specifications or guidelines of the design manual are more restrictive or apply a higher standard than other laws or regulations, that fact shall not prevent application of the specifications or guidelines in the design manual.
- (c) *Changes to standards and specifications.* Standards, specifications, guidelines, policies, criteria, or other information in the design manual in affect at the time of acceptance of a complete application shall control and shall be utilized in reviewing the application and in implementing this article with regard to the application.
- (d) *Amendments to design manual.* The design manual may be updated and expanded from time to time, based on advancements in technology and engineering, improved knowledge of local conditions, or local monitoring or maintenance experience.

Prior to amending or updating the design manual, proposed changes shall be generally publicized and made available for review, and an opportunity for comment by interested persons shall be provided.

(Ord. No. 3764, § 1(107), 11-26-2007)

Sec. 18-107. - Relationship to other laws, regulations and private agreements.

- (a) *Conflict of laws.* This article is not intended to modify or repeal any other ordinance, rule, regulation or other provision of law. The requirements of this article are in addition to the requirements of any other ordinance, rule, regulation or other provision of law, and where any provision of this article imposes restrictions different from those imposed by any other ordinance, rule, regulation or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human or environmental health, safety, and welfare, shall control.
- (b) *Private agreements.* This article is not intended to revoke or repeal any easement, covenant, or other private agreement. However, where the regulations of this article are more restrictive or impose higher standards or requirements than such easement, covenant, or other private agreement, then the requirements of this article shall govern. Nothing in this article shall modify or repeal any private covenant or deed restriction, but such covenant or restriction shall not legitimize any failure to comply with this article. In no case shall the city be obligated to enforce the provisions of any easements, covenants, or agreements between private parties.

(Ord. No. 3764, § 1(108), 11-26-2007)

Sec. 18-108. - Severability.

If the provisions of any section, subsection, paragraph, subdivision or clause of this article shall be adjudged invalid by a court of competent jurisdiction, such judgment shall not affect or invalidate the remainder of any section, subsection, paragraph, subdivision or clause of this article.

(Ord. No. 3764, § 1(109), 11-26-2007)

Sec. 18-109. - Effective date and transitional provisions.

- (a) *Effective date.* This article shall take effect on July 1, 2008.
- (b) *Violations continue.* Any violation of the provisions of this article existing as of July 1, 2008 shall continue to be a violation under this article and be subject to penalties and enforcement unless the use, development, construction, or other activity complies with the provisions of this article.

(Ord. No. 3764, § 1(110), 11-26-2007)

Sec. 18-110. - Definitions.

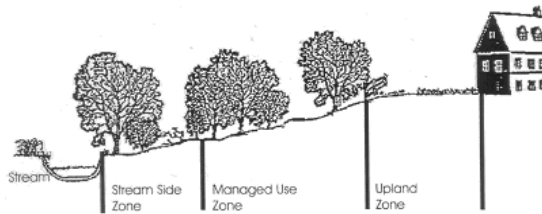
When used in this article, the following words and terms shall have the meaning set forth in this section, unless other provisions of this article specifically indicate otherwise.

Administrative manual means a manual developed by the stormwater administrator and distributed to the public to provide information for the effective administration of this article, including but not limited to application requirements, submission schedule, fee schedule, maintenance agreements, criteria for mitigation approval, criteria for recordation of documents, inspection report forms, requirements for submittal of bonds, a copy of this article, and where to obtain the design manual.

Best management practices (BMPs) means a structural management facility used singularly or in combination for stormwater quality and quantity treatment to achieve water quality protection goals.

Buffer means a natural or vegetated area through which stormwater runoff flows in a diffuse manner so that the runoff does not become channelized and which provides for infiltration of the runoff and filtering of pollutants.

Buffer zones. In the Central and Western Catawba Districts, streams draining greater than or equal to 50 acres but less than 300 acres have a two-zone buffer including a stream side and upland zone. Buffers for streams draining greater than or equal to 300 acres have three zones as shown below. The amount of disturbance allowed in the buffer differs in each zone. In the Yadkin-Southeast Catawba there are no zones, the entire buffer is undisturbed.



Buffer widths. Viewed aerially, the stream buffer width is measured horizontally on a line perpendicular to the surface water, landward from the top of the bank on each side of the stream.

Built-upon area (BUA) means that portion of a property that is covered by impervious or partially impervious surface including, but not limited to, buildings; pavement and gravel areas such as roads, parking lots, and paths; and recreation facilities such as tennis courts (activity fields that have been designed to enhance displacement of runoff, such as compaction and grading or installation of sodded turf, and underground drainage systems for public parks and schools will be considered built-upon area.) "Built-upon area" does not include a wooden slatted deck or the water area of a swimming pool.

Charlotte BMP manual means the manual of design criteria, construction standards, and details for stormwater management facilities prepared by the stormwater administrator, as periodically amended, which regulates and controls the provisions and construction of best management practices relating to post construction stormwater controls. Whenever reference is made to "standards," "design manual," or "manual," it refers to the latest published edition of this document.

Commercial development or redevelopment means any land disturbing activity that is not residential development or redevelopment as defined herein.

Development means land-disturbing activity that creates built upon area or that otherwise decreases the infiltration of precipitation into the soil.

Disturbance means any use of the land by any person or entity which results in a change in the natural cover or topography of the land.

Drainage area means That area of land that drains to a common point on a project site.

Floodplain means the low, periodically-flooded lands adjacent to streams. For land use planning purposes, the regulatory floodplain is usually viewed as all lands that would be inundated by the regulatory flood.

Grass field means land on which grasses and other herbaceous plants dominate and trees over six feet in height are sparse or so widely scattered that less than five percent of the land area is covered by a tree canopy.

Industrial uses means land used for industrial purposes only. Commercial (or other non-industrial) businesses operating on industrially-zoned property shall not be considered an industrial use.

Larger common plan of development or sale means any contiguous area where multiple separate and distinct construction or land disturbing activities will occur under one plan. A plan is any announcement or piece of documentation (including but not limited to public notice or hearing, drawing, permit application, zoning request, or site design) or physical demarcation (including but not limited to boundary signs, lot stakes, or surveyor markings) indicating that construction activities may occur on a specific plot.

Low impact development (LID) means the integration of site ecology and environmental goals and requirements into all phases of urban planning and design from the individual residential lot level to the entire watershed.

Mitigation means actions taken either on-site or off-site as allowed by this article to offset the impacts of a certain action.

Multifamily means a group of two or more attached, duplex, triplex, quadruplex, or multi-family buildings, or a single building of more than 12 units constructed on the same lot or parcel of land under single ownership, and planned and developed with a unified design of buildings and coordinated common open space and service areas in accordance with the requirements of chapter 9 of the zoning ordinance for the zoning district in which it is located.

Natural area means land that consists of natural areas containing trees and other natural shrubs consisting of either undisturbed areas or disturbed areas that have been replanted in accordance with the criteria established in this article.

Non-point source (NPS) pollution means forms of pollution caused by sediment, nutrients, organic and toxic substances originating from land use activities and carried to lakes and streams by surface runoff.

Owner means the legal or beneficial owner of land, including but not limited to a fee owner, mortgagee or vendee in possession, receiver, executor, trustee, or long-term or commercial lessee, or any other person or entity holding proprietary rights in the property or having legal power of management and control of the property. "Owner" shall include long-term commercial tenants; management entities, such as those charged with or engaged in the management of properties for profit; and every person or entity having joint ownership of the property. A secured lender not in possession of the property does not constitute an owner, unless the secured lender is included within the meaning of "owner" under another description in this definition, such as a management entity.

Person(s) means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, interstate body, or other legal entity.

Redevelopment means any land-disturbing activity that does not result in a net increase in built-upon area and that provides greater or equal stormwater control than the previous development.

Residential development means a land disturbing activity containing dwelling units with open yards on at least two sides where land is sold with each dwelling unit.

Stormwater administrator means the city engineer or designee that administers and enforces this article.

Stormwater advisory committee (SWAC) means the Charlotte-Mecklenburg Stormwater Advisory Committee as established by joint resolutions of the city council, Mecklenburg County Board of

Commissioners and the Towns of Cornelius, Davidson, Huntersville, Matthews, Mint Hill and Pineville, together with any amendments thereto.

Stormwater management permit means the development or redevelopment plan, as approved by the stormwater administrator, that details how stormwater runoff will be controlled through structural and/or nonstructural management features.

Top of bank means the landward edge of the stream channel during high water or bankfull conditions at the point where the water begins to overflow onto the floodplain.

Topsail means natural, fertile soil capable of sustaining vigorous plant growth that is of uniform composition throughout with an admixture of subsoil, has an acidity range of pH 5.5—7.0.

Total phosphorus (TP) means a nutrient that is essential to the growth of organisms but when it occurs in high enough concentrations it can negatively impact water quality conditions. Total phosphorus includes both dissolved and suspended forms of reactive phosphorus, acid hydrolyzable phosphorus and organic phosphorus as measured by Standard Method 4500-P.

Total suspended solids (TSS) means total suspended matter in water which includes particles collected on a filter with a pore size of two microns as measured by Standard Method 2540-D, which is commonly expressed as a concentration in terms of milligrams per liter (mg/l) or parts per million (ppm).

(Ord. No. 3764, § 8, 11-26-2007)

Secs. 18-111—18-120. - Reserved.

DIVISION 2. - ADMINISTRATION AND PROCEDURES

Sec. 18-121. - Review and decision making entities.

(a) *Stormwater administrator.*

- (1) *Designation.* The city engineer has been designated as the stormwater administrator and he, or his designee, is authorized to administer and enforce these regulations.
- (2) *Powers and duties.* In addition to the powers and duties that may be conferred by other provisions of this Code and other laws, the stormwater administrator shall have the following powers and duties under this article:
 - a. To review and approve or disapprove applications submitted pursuant to this article.
 - b. To make determinations and render interpretations of this article.
 - c. To establish application requirements and schedules for submittal and review of applications and appeals.
 - d. To enforce this article in accordance with its enforcement provisions.
 - e. To maintain records, maps, and official materials as relate to the adoption, amendment, enforcement, or administration of this article.
 - f. To provide expertise and technical assistance upon request to the city council and the stormwater advisory committee (SWAC).
 - g. To designate appropriate other person(s) who shall carry out the powers and duties of the stormwater administrator.
 - h. To provide information and recommendations relative to variances and information as requested by SWAC in response to appeals.

- i. Prepare and make available to the public an administrative manual that includes: the stormwater management permit application; submittal checklist; fee schedule; maintenance agreements; and a reference to the design manual.
 - j. To take any other action necessary to administer the provisions of this article.
- (b) ~~*Powers and duties of the Sstormwater advisory committee. The stormwater advisory committee, hereinafter referred to as SWAC, shall have the following powers and duties:*~~
- (1) ~~*The stormwater advisory committee, hereinafter referred to as SWAC, shall have the following powers and duties:*~~
 - ~~*a. Administrative review. To hear and decide appeals according to the procedures set forth in this section, where it is alleged there is an error in any order, decision, determination, or interpretation made by the stormwater administrator in the enforcement of this article, including assessments of remedies and/or penalties.*~~
 - ~~*b. Variances. To grant variances in specific cases from the terms of this article according to the standards and procedures herein.*~~
 - (2) ~~*Conflict of Interest. Members of SWAC shall not participate in or vote on any matter where the outcome of the matter being considered is reasonably likely to have a direct, substantial, and readily identifiable financial impact on the member or if the applicant or other person subject to that decision is a person with whom the SWAC member has a close familial, business, or other associational relationship. In exercising quasi-judicial functions, members of SWAC shall not participate in or vote on any quasi-judicial matter in a manner that would violate affected persons' constitutional rights to an impartial decision maker. Impermissible violations of due process include, but are not limited to, a member having a fixed opinion prior to hearing the matter that is not susceptible to change, undisclosed ex parte communications, a close familial, business, or other associational relationship with an affected person, or a financial interest in the outcome of the matter.*~~
 - ~~*a. Resolution of Objection. If an objection is raised to a SWAC member's participation at or prior to the hearing or vote on a particular matter and that member does not recuse himself or herself, the remaining members of SWAC shall by majority vote rule on the objection.*~~
 - ~~*b. Familial Relationship. For purposes of this section, a "close familial relationship" means a spouse, parent, child, brother, sister, grandparent, or grandchild. The term includes the step, half, and in-law relationships.*~~
 - (3) ~~*Oath of Office. Any member of SWAC must take an oath-of-office before commencing any duties of the committee.*~~
 - (4) ~~*Meeting Minutes. Minutes of the meeting proceedings must be taken and kept pursuant to the North Carolina Retention Schedule.*~~
 - (5) ~~*Rules of Procedure. A copy of the Rules of Procedure adopted by SWAC shall be maintained by the clerk or other designated official and posted on the City of Charlotte website.*~~
- (c) ~~*Administrative staff. No staff member shall make a final decision on an administrative decision required by this chapter if the outcome of that decision would have a direct, substantial, and readily identifiable financial impact on the staff member or if the applicant or other person subject to that decision is a person with whom the staff member has a close familial, business, or other associational relationship. If a staff member has a conflict of interest under this section, the decision shall be assigned to the supervisor of the staff person or such other staff person as may be designated by the development regulation or other ordinance. No staff member shall be financially interested or employed by a business that is financially interested in a development subject to regulation under this article unless the staff member is the owner of the land or building involved. No staff member or other individual or an employee of a company contracting with the city to provide staff support shall engage in any work that is inconsistent with his or her duties or with the interest of the city, as determined by the city. For purposes of this article, a "close familial relationship" means a spouse, parent, child, brother, sister, grandparent, or grandchild. The term includes the step, half, and in-law relationships.*~~

(Ord. No. 3764, § 2(201), 11-26-2007)

Sec. 18-122. - Stormwater management permit.

- (a) *Stormwater management permit required.* A stormwater management permit is required for all proposed development and redevelopment unless exempt pursuant to this article. For the purpose of this article, the final approved stormwater management plan as contained in the development or redevelopment plan shall constitute the stormwater management permit.
- (b) *Submission of a stormwater management plan.*
 - (1) *General.* A preliminary stormwater management plan developed in accordance with the specifications set forth in the administrative manual must be submitted to the planning staff or land development division as part of the preliminary plan for development or redevelopment and will be reviewed in accordance with established procedures.
 - (2) *Stormwater management plan contents and form.* The stormwater administrator shall establish requirements for the content and form of the preliminary stormwater management plan. These general requirements shall be contained in the administrative manual, which may be amended from time to time.
 - (3) *Permit review fees.* A fee, as established by city council, shall accompany the submission of the preliminary stormwater management plan.
 - (4) *Complete submission.* A preliminary stormwater management plan will not be considered complete until it contains all elements required by the stormwater administrator, along with the appropriate fee. If the stormwater administrator finds that a preliminary stormwater management plan is incomplete, the applicant shall be notified of the deficient elements and provided with an opportunity to correct the plan. No review of the stormwater management plan will commence until the stormwater administrator has determined the plan is complete.
- (c) *Review and approval of stormwater management plan.*
 - (1) *Preparation by professional required.* The preliminary stormwater management plan shall be prepared by a registered state professional engineer or registered landscape architect. The engineer or registered landscape architect shall certify that the design of all stormwater management facilities and practices meets the requirements of these regulations.
 - (2) *Final approval of stormwater management plan.* If the stormwater administrator finds that the stormwater management plan complies with the requirements of these regulations, the stormwater administrator shall approve the stormwater management plan, which approval shall constitute the issuance of the permit. The stormwater administrator may impose conditions of approval as needed to ensure compliance with this article. The conditions shall be included in the permit as part of the approval.
 - (3) *Effect of the permit.* The permit issued under the provisions of this chapter shall remain valid for a period of three years from the date of approval. If no work on the site in furtherance of the plan has commenced within the three-year period, the permit and plan approval will become null and void and a new application will be required to develop the site. If work on the site in furtherance of the plan has commenced that involves any utility installations or street improvements except grading, the permit and plan shall remain valid and in force and the project may be completed in accordance with the approved plan.
 - (4) *Disapproval of stormwater management plan.* If the stormwater administrator disapproves the preliminary stormwater management plan, the grounds for such disapproval will be stated in writing to the applicant. After such disapproval, an appeal from that decision may be taken to SWAC in accordance with section 18-124. SWAC may approve, disapprove, in whole or in part, or otherwise modify the action of the stormwater administrator. A final stormwater management plan approved by SWAC, after appeal from the decision of the stormwater administrator, will qualify as the permit.

(Ord. No. 3764, § 2(202), 11-26-2007)

Sec. 18-123. - As-built plans and final approval.

The applicant shall certify that the completed project is in accordance with the approved stormwater management plans and designs, and shall submit actual "as-built" plans for all stormwater management facilities or practices after final construction is completed. Failure to provide approved as-built plans within the time frame specified by the stormwater administrator may result in assessment of penalties as specified in division 7. At the discretion of the stormwater administrator, performance securities or bonds may be required for stormwater management facilities or practices until as-built plans are approved.

As-built plans shall show the final design specifications for all stormwater management facilities and practices and the field location, size, depth, and planted vegetation of all measures, controls, and devices, as installed, and location and size of all natural area and tree plantings. The designer of the stormwater management measures and plans shall certify, under seal, that the as-built stormwater measures, controls, and devices are in compliance with the approved stormwater management plans and designs and with the requirements of this article. As conditions of the as-built plan(s) approval, the designer will submit a digital copy of the as-built plan(s) as described in the administrative manual to the stormwater administrator for the purpose of maintaining records, performing inspections, maintenance and other future needs as determined by the city.

Approved final as-built plans and a final inspection by the stormwater administrator are required before a project is determined to be in compliance with this article. At the discretion of the stormwater administrator, certificates of occupancy may be withheld pending receipt of as-built plans and the completion of a final inspection and approval of a project.

(Ord. No. 3764, § 2(203), 11-26-2007)

Sec. 18-124. - Appeals and variances.

(a) *Petition to SWAC for appeal or variance.* An appeal may be initiated by any aggrieved person affected by any decision, order, requirement, or determination relating to the interpretation or application of this article. A petition for variance from the requirements of this article may be initiated by the owner of the affected property, an agent authorized in writing to act on the owner's behalf, or a person having written contractual interest in the affected property.

(1) *Filing of notice of appeal.* A notice of appeal shall be filed with the stormwater administrator contesting any order, decision, determination or interpretation within 30 ~~working~~ days of ~~receipt of the written day of the~~ order, decision, determination or interpretation made or rendered by the stormwater administrator in the enforcement of this article, including assessments of remedies and penalties. If the notice of the administrator's decision, determination, or interpretation is sent by mail, it is presumed received on the third business day after it is sent. SWAC may waive or extend the 30-day deadline only upon determining that the person filing the notice of appeal received no actual or constructive form of notice of the order, decision, determination or interpretation being appealed. The notice filed with the stormwater administrator shall be accompanied by a nonrefundable filing fee as established by SWAC as well as a list of adjoining properties including tax parcel numbers and the name and address of each owner. Failure to timely file such notice and fee shall constitute a waiver of any rights to appeal under this article.

Upon receipt of a notice of appeal, the stormwater administrator shall transmit to SWAC copies of all administrative papers, records, and other information regarding the subject matter of the appeal.

The filing of such notice shall stay any proceedings in furtherance of the contested action, except the stormwater administrator may certify in writing to SWAC that because of facts stated in the certificate, a stay imposes an imminent peril to life or property or would seriously interfere

with the enforcement of this article. SWAC shall then review such certificate and may override the stay of further proceedings.

- (2) *Filing a variance petition.* A petition for variance, in the form prescribed by SWAC, shall be filed with the stormwater administrator accompanied by a nonrefundable filing fee as established by SWAC as well as a list of adjoining properties including tax parcel numbers and the name and address of each owner. Upon receipt of a variance petition, the stormwater administrator shall transmit to SWAC copies of all information regarding the variance.
- (3) *Notice and hearing.* SWAC shall, in accordance with the rules adopted by it for such purposes, hold public hearings on any appeal or variance petition which comes before it. SWAC shall, prior to the hearing, mail written notice of the time, place and subject of the hearing to the person or persons filing the notice of appeal or variance petition, to the owners of the subject property and to the owners of property ~~adjacent to~~ abutting the subject property. ~~The hearing shall be conducted in the nature of a quasi-judicial proceeding with all findings of fact supported by competent, material evidence. In determining appeals of administrative decisions and variances, SWAC shall conduct an evidentiary hearing and follow the statutory procedures for all quasi-judicial decisions as required by G.S. Sec. 160D-406. All parties with standing shall be allowed to participate fully in the evidentiary hearing, including presenting evidence, cross-examining witnesses, objecting to evidence, and making legal arguments. For appeals of administrative decisions, the administrator or staff person who made the decision (or his or her successor if the person is no longer employed) shall be present at the quasi-judicial hearing to appear as a witness.~~
- (4) *Standards for granting an appeal.* SWAC shall reverse or modify the order, decision, determination or interpretation under appeal only upon finding an error in the application of this article on the part of the stormwater administrator. In modifying the order, decision, determination or interpretation, SWAC shall have all the powers of the stormwater administrator from whom the appeal is taken.

If SWAC finds that a violation of this article has occurred, but that in setting the amount of the penalty the stormwater administrator has not considered or given appropriate weight to either mitigating or aggravating factors, SWAC shall either decrease or increase the per day civil penalty within the range allowed by this article. Any decision of SWAC that modifies the amount of a civil penalty shall include, as part of the findings of fact and conclusions of law, findings as to which mitigating or aggravating factors exist and the appropriate weight that should have been given to such factors by the stormwater administrator in setting the amount of the civil penalty levied against the petitioner.

- (5) *Standards for granting a variance.* Before granting a variance, SWAC shall have made all the following findings:
 - a. Unnecessary hardships would result from the strict application of this article.
 - b. The hardships result from conditions that are peculiar to the property, such as the location, size or topography of the property.
 - c. The hardships did not result from actions taken by the petitioner.
 - d. The requested variance is consistent with the spirit, purpose, and intent of this article; will secure public safety and welfare; and will preserve substantial justice.
- (6) *Variance conditions.* SWAC may impose reasonable and appropriate conditions and safeguards upon any variance it grants.

~~(7)~~ *Variance approvals.* Variance approvals attach to and run with the land pursuant to G.S. Sec. 160D-104.

- ~~(7)~~ *Action by SWAC.* SWAC bylaws will determine the number of concurring votes needed to grant an appeal or request for variance. SWAC shall grant or deny the variance or shall reverse, affirm or modify the order, decision, determination or interpretation under appeal by recording in the minutes of the meeting the reasons that SWAC used and the findings of fact and conclusions of

law made by SWAC to reach its decision. Every committee decision shall be based upon competent, material, and substantial evidence in the record. Each committee decision shall be reduced to writing and reflect the committee's determination of contested facts and their application to the applicable standards. The decision of the committee shall be delivered within a reasonable time by personal delivery, electronic mail, or first-class mail to the stormwater administrator, applicant/appellant, landowner, and any person who has submitted a written request for a copy prior to the date the decision becomes effective. The person required to provide notice shall certify to the local government that proper notice has been made.

- (89) *Rehearing.* SWAC shall refuse to hear an appeal or variance petition which has been previously denied unless it finds there have been substantial changes in the conditions or circumstances relating to the matter.
- (b) *Review by superior court.* Every decision of SWAC shall be subject to superior court review by proceedings in the nature of certiorari. Petition for review by the superior court shall be filed with the clerk of superior court within 30 days after the later occurring of the following:
- (1) The decision of SWAC is ~~filed effective~~, or
 - (2) A written copy thereof is delivered to ~~every aggrieved party who has filed a written request for such copy with SWAC at the time of its hearing of the case the petitioning party. If the decision is sent by mail, three days shall be added to the time to file the petition.~~

(Ord. No. 3764, § 2(205), 11-26-2007)

Editor's note— Ord. No. 3764, § 2(205), adopted November 26, 2007, enacted provisions intended for use as subsections 1. and 2. To preserve the style of this Code, and at the discretion of the editor, said provisions have been redesignated as subsections (a) and (b).

Secs. 18-125—18-140. - Reserved.

DIVISION 3. - STANDARDS

Sec. 18-141. - General standards.

All development and redevelopment to which this article applies shall comply with the standards of this section.

(Ord. No. 3764, § 3(301), 11-26-2007)

Sec. 18-142. - Watershed districts.

Standards for development and redevelopment vary depending on the watershed district in which a project is located as described in the "Post-Construction Ordinance Map of the City," which is adopted simultaneously herewith as described in subsection 18-105(d). The city is divided into the following watershed districts for purposes of this article:

- (1) *Central Catawba.* That area of land that drains to Sugar, Little Sugar and McAlpine Creeks in the city, including all tributaries, except Six Mile Creek.
- (2) *Western Catawba.* That area of land that drains to Lake Norman, Mountain Island Lake and Lake Wylie in Mecklenburg County including all creeks and tributaries.
- (3) *Yadkin-Southeast Catawba.* That area of land that drains to the Yadkin River basin in Mecklenburg County, including all creeks and tributaries and in addition including Six Mile Creek.

(Ord. No. 3764, § 3(302), 11-26-2007)

Editor's note— Ord. No. 3764, § 3(302), adopted November 26, 2007, enacted provisions intended for use as subsections (a)—(c). To preserve the style of this Code, and at the discretion of the editor, said provisions have been redesignated as subsections (1)—(3).

Sec. 18-143. - Standards for the Central Catawba district.

- (a) *Standards for low density projects.* Any drainage area within a project boundary in the Central Catawba district is considered low density when said drainage area has less than or equal to 24 percent built upon area as determined by the methodology established in the design manual. Such low-density projects shall comply with each of the following standards.
- (1) *Vegetated conveyances.* Stormwater runoff shall be transported by vegetated conveyances to the maximum extent practicable.
 - (2) *Stream buffers.* The S.W.I.M. stream buffer requirements apply in the Central Catawba as described in the jurisdiction's zoning ordinance, chapter 12. In addition, intermittent and perennial streams within the project boundary shall be delineated by a certified professional using U.S. Army Corps of Engineers and N.C. Division of Water Quality methodology and shall be shown in the stormwater management permit application along with all buffer areas. All perennial and intermittent streams draining less than 50 acres shall have a minimum 30-foot vegetated buffer including a ten-foot zone adjacent to the bank. Disturbance of the buffer is allowed; however, any disturbed area must be revegetated and disturbance of the ten-foot zone adjacent to the bank shall require stream bank stabilization using bioengineering techniques as specified in the design manual. All perennial and intermittent streams draining greater than or equal to 50 acres and less than 300 acres shall have a 35-foot buffer with two zones, including stream side and upland. Streams draining greater than or equal to 300 acres and less than 640 acres shall have a 50-foot buffer with three zones, including stream side, managed use and upland. Streams draining greater than or equal to 640 acres shall have a 100-foot buffer, plus 50 percent of the area of the floodfringe beyond 100 feet. This buffer shall consist of three zones, including stream side, managed use and upland. All buffers shall be measured from the top of the bank on both sides of the stream. The uses allowed in the different buffer zones as described in the S.W.I.M. stream buffer requirements in the city's zoning ordinance, chapter 12, as well as the other provisions of the S.W.I.M. ordinance shall apply in the Central Catawba district (except buffer widths).
- (b) *Standards for high density projects.* Any drainage area within a project boundary in the Central Catawba district is considered high density when said drainage area has greater than 24 percent built upon area as determined by the methodology established in the design manual. Such high-density projects shall implement stormwater treatment systems that comply with each of the following standards.
- (1) *Stormwater quality treatment volume.* Stormwater quality treatment systems shall treat the runoff generated from the first inch of rainfall.
 - (2) *Stormwater quality treatment.* All structural stormwater treatment systems used to meet these requirements shall be designed to have a minimum of 85% average annual removal for total suspended solids. Low impact development techniques as described in the design manual can be used to meet this requirement.
 - (3) *Stormwater treatment system design.* General engineering design criteria for all projects shall be in accordance with 15A NCAC 2H . 1008(c), as explained in the design manual.
 - (4) *Stream buffers.* The S.W.I.M. stream buffer requirements apply in the Central Catawba as described in the city's zoning ordinance, chapter 12. In addition, intermittent and perennial streams within the project boundary shall be delineated by a certified professional using U.S. Army Corps of Engineers and N.C. Division of Water Quality methodology and shall be shown in the stormwater management permit application along with all buffer areas. All perennial and

intermittent streams draining less than 50 acres shall have a minimum 30-foot vegetated buffer including a ten-foot zone adjacent to the bank. Disturbance of the buffer is allowed; however, any disturbed area must be revegetated and disturbance of the ten-foot zone adjacent to the bank shall require stream bank stabilization using bioengineering techniques as specified in the design manual. All perennial and intermittent streams draining greater than or equal to 50 acres and less than 300 acres shall have a 35-foot buffer with two zones, including stream side and upland. Streams draining greater than or equal to 300 acres and less than 640 acres shall have a 50-foot buffer with three zones, including stream side, managed use and upland. Streams draining greater than or equal to 640 acres shall have a 100-foot buffer, plus 50 percent of the area of the floodfringe beyond 100 feet. This buffer shall consist of three zones, including stream side, managed use and upland. All buffers shall be measured from the top of the bank on both sides of the stream. The uses allowed in the different buffer zones as described in the S.W.I.M. stream buffer requirements in the jurisdiction's zoning ordinance, chapter 12, as well as the other provisions of the S.W.I.M. ordinance shall apply in the Central Catawba district (except buffer widths).

- (5) *Stormwater volume control.* Stormwater treatment systems shall be installed to control the volume leaving the project site at post-development for the one-year, 24-hour storm except I-1 and I-2 zoned developments which are exempt from this requirement. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours.
- (6) *Stormwater peak control.* For residential land disturbing activities exceeding 24 percent built-upon area, peak control shall be installed for the appropriate storm frequency (i.e., 10-, 25-, 50- or 100-year, six-hour) as determined by the stormwater administrator based on a downstream flood analysis provided by the owner or designee using the criteria specified in the design manual or if a downstream analysis is not performed the peak shall be controlled for the ten-year and 25-year, six-hour storms. For commercial land disturbing activities exceeding 24 percent built-upon area, peak control shall be installed for the ten-year, six-hour storm and additional peak control provided for the appropriate storm frequency (i.e., 25-, 50- or 100-year, six-hour) as determined by the stormwater administrator based on a downstream flood analysis provided by the owner or designee using the criteria specified in the design manual or if a downstream analysis is not performed the peak shall be controlled for the ten-year and 25-year, six-hour storms. Controlling the one-year, 24-hour volume achieves peak control for the two-year, six-hour storm. For I-1 and I-2 zoned developments, peak control shall be installed for the two-year and ten-year, six-hour storms and additional peak control provided for the appropriate storm frequency (i.e., 25-, 50- or 100-year, six-hour) based on a downstream flood analysis or if a downstream analysis is not performed the peak shall be controlled for the two-year, ten-year and 25-year, six-hour storms. The emergency overflow and outlet works for any pond or wetland constructed as a stormwater BMP shall be capable of safely passing a discharge with a minimum recurrence frequency as specified in the design manual. For detention basins, the temporary storage capacity shall be restored within 72 hours. Requirements of the Dam Safety Act shall be met when applicable.

(Ord. No. 3764, § 3(303), 11-26-2007)

Sec. 18-144. - Standards for the Western Catawba district.

- (a) *Standards for low density projects.* Any drainage area within a project boundary in the Western Catawba district is considered low density when said drainage area has less than or equal to 12 percent built-upon area as determined by the methodology established in the design manual. Such low-density projects shall comply with each of the following standards:
 - (1) *Vegetated conveyances.* Stormwater runoff shall be transported by vegetated conveyances to the maximum extent practicable.
 - (2) *Stream buffers.* The S.W.I.M. stream buffer requirements apply in the Western Catawba as described in the city's zoning ordinance, chapter 12 as do the buffers described for the watershed overlays contained in chapter 10. When there is a conflict between buffer requirements, the more

stringent always applies. In addition, intermittent and perennial streams within the project boundary shall be delineated by a certified professional using U.S. Army Corps of Engineers and N.C. Division of Water Quality methodology and shall be shown in the stormwater management permit application along with all buffer areas. All perennial and intermittent streams draining less than 50 acres shall have a minimum 30-foot vegetated buffer including a ten-foot zone adjacent to the bank. Disturbance of the buffer is allowed; however, any disturbed area must be revegetated and disturbance of the ten-foot zone adjacent to the bank shall require stream bank stabilization using bioengineering techniques as specified in the design manual. All perennial and intermittent streams draining greater than or equal to 50 acres and less than 300 acres shall have a 35-foot buffer with two zones, including stream side and upland. Streams draining greater than or equal to 300 acres and less than 640 acres shall have a 50-foot buffer with three zones, including stream side, managed use and upland. Streams draining greater than or equal to 640 acres shall have a 100-foot buffer, plus 50 percent of the area of the floodfringe beyond 100 feet. This buffer shall consist of three zones, including stream side, managed use and upland. All buffers shall be measured from the top of the bank on both sides of the stream. The uses allowed in the different buffer zones as described in the S.W.I.M. stream buffer requirements in the jurisdiction's zoning ordinance, chapter 12, as well as the other provisions of the S.W.I.M. ordinance shall apply in the Western Catawba district (except buffer widths).

- (b) *Development standards for high density projects.* Any drainage area within a project boundary in the Western Catawba district is considered high density when said drainage area has greater than 12 percent built upon area as determined by the methodology established in the design manual. The built upon area caps specified in the water supply watershed protection requirements contained in the city's zoning ordinance shall apply. High-density projects shall implement stormwater treatment systems that comply with each of the following standards:
- (1) *Stormwater quality treatment volume.* Stormwater quality treatment systems shall treat the runoff generated from the first inch of rainfall.
 - (2) *Stormwater quality treatment.* All structural stormwater treatment systems used to meet these requirements shall be designed to have a minimum of 85 percent average annual removal for total suspended solids and 70 percent average annual removal for total phosphorus except I-1 and I-2 zoned developments which are exempt from the total phosphorus removal requirement. I-1 and I-2 zoned developments shall implement a management plan for the proper handling and application of pesticides and fertilizers to reduce negative water quality impacts. Low impact development techniques as described in the design manual can be used to meet pollutant removal requirements.
 - (3) *Stormwater treatment system design.* General engineering design criteria for all projects shall be in accordance with 15A NCAC 2H . 1008(c), as explained in the design manual.
 - (4) *Stream buffers.* The S.W.I.M. stream buffer requirements apply in the Western Catawba [district] as described in the city's zoning ordinance, chapter 12 as do the buffers described for the watershed overlays contained in chapter 10. When there is a conflict between buffer requirements, the more stringent always applies. In addition, intermittent and perennial streams within the project boundary shall be delineated by a certified professional using U.S. Army Corps of Engineers and N.C. Division of Water Quality methodology and shall be shown in the stormwater management permit application along with all buffer areas. All perennial and intermittent streams draining less than 50 acres shall have a minimum 30-foot vegetated buffer including a ten-foot zone adjacent to the bank. Disturbance of the buffer is allowed; however, any disturbed area must be revegetated and disturbance of the ten-foot zone adjacent to the bank shall require stream bank stabilization using bioengineering techniques as specified in the design manual. All perennial and intermittent streams draining greater than or equal to 50 acres and less than 300 acres shall have a 35-foot buffer with two zones, including stream side and upland. Streams draining greater than or equal to 300 acres and less than 640 acres shall have a 50-foot buffer with three zones, including stream side, managed use and upland. Streams draining greater than or equal to 640 acres shall have a 100-foot buffer, plus 50 percent of the area of the floodfringe beyond 100 feet. This buffer shall consist of three zones, including stream side,

managed use and upland. All buffers shall be measured from the top of the bank on both sides of the stream. The uses allowed in the different buffer zones as described in the S.W.I.M. stream buffer requirements in the jurisdiction's zoning ordinance, chapter 12, as well as the other provisions of the S.W.I.M. ordinance shall apply in the Western Catawba district (except buffer widths).

- (5) *Stormwater volume control.* Stormwater treatment systems shall be installed to control the volume leaving the project site at post-development for the one-year, 24-hour storm except I-1 and I-2 zoned developments which are exempt from this requirement. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours.
- (6) *Stormwater peak control.* For residential land disturbing activities exceeding 12 percent built-upon area, peak control shall be installed for the appropriate storm frequency (i.e., 10-, 25-, 50- or 100-year, six-hour) as determined by the stormwater administrator based on a downstream flood analysis provided by the owner or designee using the criteria specified in the design manual or if a downstream analysis is not performed the peak shall be controlled for the ten-year and 25-year, six-hour storms. For commercial land disturbing activities exceeding 12 percent built-upon area, peak control shall be installed for the ten-year, six-hour storm and additional peak control provided for the appropriate storm frequency (i.e., 25-, 50- or 100-year, six-hour) as determined by the stormwater administrator based on a downstream flood analysis provided by the owner or designee using the criteria specified in the design manual or if a downstream analysis is not performed the peak shall be controlled for the ten-year and 25-year, six-hour storms. Controlling the one-year, 24-hour volume achieves peak control for the two-year, six-hour storm. For I-1 and I-2 zoned developments, peak control shall be installed for the two-year and ten-year, six-hour storms and additional peak control provided for the appropriate storm frequency (i.e., 25-, 50- or 100-year, six-hour) based on a downstream flood analysis or if a downstream analysis is not performed the peak shall be controlled for the two-year, ten-year and 25-year, six-hour storms. The emergency overflow and outlet works for any pond or wetland constructed as a stormwater BMP shall be capable of safely passing a discharge with a minimum recurrence frequency as specified in the design manual. For detention basins, the temporary storage capacity shall be restored within 72 hours. Requirements of the Dam Safety Act shall be met when applicable.

(Ord. No. 3764, § 3(304), 11-26-2007)

Sec. 18-145. - Standards for the Yadkin-Southeast Catawba district.

- (a) *Standards for low density projects.* Any drainage area within a project boundary in the Yadkin-Southeast Catawba District is considered low density when said drainage area has less than or equal to ten percent built upon area as determined by the methodology established in the design manual. Such low-density projects shall comply with each of the following standards:
 - (1) *Vegetated conveyances.* Stormwater runoff shall be transported by vegetated conveyances to the maximum extent practicable.
 - (2) *Stream buffers.* In addition, intermittent and perennial streams within the project boundary shall be delineated by a certified professional using U.S. Army Corps of Engineers and N.C. Division of Water Quality methodology and shall be shown in the stormwater management permit application along with all buffer areas. All perennial and intermittent streams draining less than 50 acres shall have a minimum 50-foot undisturbed buffer. All perennial and intermittent streams draining greater than or equal to 50 acres shall have a 100-foot undisturbed buffer, plus the entire floodplain. All buffers shall be measured from the top of the bank on both sides of the stream. The uses allowed in the stream side zone described in the S.W.I.M. stream buffer requirements in the jurisdiction's zoning ordinance, chapter 12, as well as the other provisions of the S.W.I.M. ordinance shall apply in the Yadkin-Southeast Catawba district (except buffer widths).

Six Mile Creek watershed only. In addition to the above information for streams in the Yadkin-Southeast Basin Watershed, all perennial streams in the Six Mile Creek Watershed shall have

200-foot undisturbed buffers, plus entire floodplain and all intermittent streams in the Six Mile Creek Watershed shall have 100-foot undisturbed buffers all measured on each side of the stream from top of bank.

(b) *Standards for high density projects.* Any drainage area within a project boundary in the Yadkin-Southeast Catawba District is considered high density when said drainage area has greater than ten percent built upon area as determined by the methodology established in the design manual. Such high-density projects shall implement stormwater treatment systems that comply with each of the following standards:

- (1) *Stormwater quality treatment volume.* Stormwater quality treatment systems shall treat the runoff generated from the first inch of rainfall.
- (2) *Stormwater quality treatment.* All structural stormwater treatment systems used to meet these requirements shall be designed to have a minimum of 85 percent average annual removal for total suspended solids and 70 percent average annual removal for total phosphorus except I-1 and I-2 zoned developments which are exempt from the total phosphorus removal requirement. I-1 and I-2 zoned developments shall implement a management plan for the proper handling and application of pesticides and fertilizers to reduce negative water quality impacts. Low impact development techniques as described in the design manual can be used to meet pollutant removal requirements.
- (3) *Stormwater treatment system design.* General engineering design criteria for all projects shall be in accordance with 15A NCAC 2H .1008(c), as explained in the design manual.
- (4) *Stream buffers.* In addition, intermittent and perennial streams within the project boundary shall be delineated by a certified professional using U.S. Army Corps of Engineers and N.C. Division of Water Quality methodology and shall be shown in the stormwater management permit application along with all buffer areas. All perennial and intermittent streams draining less than 50 acres shall have a minimum 50-foot undisturbed buffer. All perennial and intermittent streams draining greater than or equal to 50 acres shall have a 100-foot undisturbed buffer, plus the entire floodplain. All buffers shall be measured from the top of the bank on both sides of the stream. The uses allowed in the stream side zone described in the S.W.I.M. stream buffer requirements in the city's zoning ordinance, chapter 12, as well as the other provisions of the S.W.I.M. ordinance shall apply in the Yadkin-Southeast Catawba District (except buffer widths).

Six Mile Creek watershed only. In addition to the above information for streams in the Yadkin-Southeast Basin Watershed, all perennial streams in the Six Mile Creek Watershed shall have 200-foot undisturbed buffers, plus entire floodplain and all intermittent streams in the Six Mile Creek Watershed shall have 100-foot undisturbed buffers all measured on each side of the stream from top of bank.

- (5) *Stormwater volume control.* Stormwater treatment systems shall be installed to control the volume leaving the project site at post-development for the one-year, 24-hour storm except I-1 and I-2 zoned developments which are exempt from this requirement. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours.
- (6) *Stormwater peak control.* For residential land disturbing activities exceeding ten percent built-upon area, peak control shall be installed for the appropriate storm frequency (i.e., 10-, 25-, 50- or 100-year, six-hour) as determined by the stormwater administrator based on a downstream flood analysis provided by the owner or designee using the criteria specified in the design manual or if a downstream analysis is not performed the peak shall be controlled for the ten-year and 25-year, six-hour storms. For commercial land disturbing activities exceeding ten percent built-upon area, peak control shall be installed for the ten-year, six-hour storm and additional peak control provided for the appropriate storm frequency (i.e., 25-, 50- or 100-year, six-hour) as determined by the stormwater administrator based on a downstream flood analysis provided by the owner or designee using the criteria specified in the design manual or if a downstream analysis is not performed the peak shall be controlled for the ten-year and 25-year, six-hour storms. Controlling the one-year, 24-hour volume achieves peak control for the two-year, six-hour storm. For I-1 and

I-2 zoned developments, peak control shall be installed for the two-year and ten-year, six-hour storms and additional peak control provided for the appropriate storm frequency (i.e., 25-, 50- or 100-year, six-hour) based on a downstream flood analysis or if a downstream analysis is not performed the peak shall be controlled for the two-year, ten-year and 25-year, six-hour storms. The emergency overflow and outlet works for any pond or wetland constructed as a stormwater BMP shall be capable of safely passing a discharge with a minimum recurrence frequency as specified in the design manual. For detention basins, the temporary storage capacity shall be restored within 72 hours. Requirements of the Dam Safety Act shall be met when applicable.

(Ord. No. 3764, § 3(305), 11-26-2007)

Sec. 18-146. - Standards for stormwater control measures.

- (a) *Evaluation according to contents of design manual.* All stormwater control measures and stormwater treatment practices (also referred to as best management practices, or BMPs) required under this article shall be evaluated by the stormwater administrator according to the policies, criteria, and information, including technical specifications, standards and the specific design criteria for each stormwater best management practice contained in the design manual. The stormwater administrator shall determine whether these measures will be adequate to meet the requirements of this article.
- (b) *Determination of adequacy; presumptions and alternatives.* Stormwater treatment practices that are designed, constructed, and maintained in accordance with the criteria and specifications in the design manual will be presumed to meet the minimum water quality and quantity performance standards of this article. Whenever an applicant proposes to utilize a practice or practices not designed and constructed in accordance with the criteria and specifications in the design manual, the applicant shall have the burden of demonstrating that the practice(s) will satisfy the minimum water quality and quantity performance standards of this article before it can be approved for use. The stormwater administrator may require the applicant to provide such documentation, calculations, and examples as necessary for the stormwater administrator to determine whether such an affirmative showing is made.
- (c) *Submittal of digital records.* Upon submittal of as-built plans, the location of storm drainage pipes, inlets and outlets as well as the location of all BMPs as well as natural area must be delivered to the stormwater administrator in the digital format specified in the administrative manual.

(Ord. No. 3764, § 3(306), 11-26-2007)

Sec. 18-147. - Total phosphorus mitigation.

- (a) *Purpose.* The purpose of this mitigation is to reduce the cost of complying with the 70 percent total phosphorus removal criteria for development and redevelopment with greater than or equal to 24 percent built-upon area while ensuring the reduction of pollution loads and achievement of the ordinance objectives.
- (b) *General description.* There are two total phosphorus mitigation options available to development and redevelopment greater than or equal to 24 percent built-upon area, including off-site mitigation and a buy-down option as described in this section. Both off-site and buy-down mitigation will result in the construction of retrofit BMPs in the same river basin (Catawba or Yadkin) as the mitigated site. In the Western Catawba district both forms of mitigation must occur in the watershed of the same named creek system for the purpose of ensuring a balance of total phosphorus loads to lake cove areas where phosphorus is a limiting pollutant with the exception that up to 30 percent of the buy-down money can be spent outside the watershed. In addition, the buy-down option is available provided the city has projects and/or property available for mitigation. There is no total phosphorus requirement in the Central Catawba District so the mitigation option is not necessary. The named creek (or drainage basin) systems referred to above include:

- (1) *Western Catawba*. Studman Branch, Porter Branch, Neal Branch, Stowe Branch, Beaverdam Creek, Little Paw Creek, Paw Creek, Long Creek, Gar Creek, and the Lower Mountain Island watershed.
 - (2) *Yadkin-Southeast Catawba*. Six Mile Creek, Twelve Mile Creek, Caldwell Creek, McKee Creek, Reedy Creek, Fuda Creek, Back Creek, Mallard Creek, and Lower Clarke Creek.
- (c) *Criteria for off-site mitigation.*
- (1) The owner or designee of a proposed construction site that will include greater than or equal to 24 percent built upon area shall construct a BMP retrofit project designed to achieve an equivalent or greater net mass removal of total phosphorus as would be achieved by removing 70 percent of the total phosphorus from the proposed site. Off-site mitigation is allowed only for total phosphorus removal above 50 percent. On-site BMPs shall be constructed to achieve 50 percent removal of total phosphorus from the project site.
 - (2) The stormwater administrator shall receive, review, approve, disapprove or approve with conditions an "Application for Off-Site Total Phosphorus Mitigation." The stormwater administrator shall design this application to include all pertinent information. This application shall be submitted with the stormwater management permit application and shall at a minimum contain a description of the BMP(s) to be constructed, including their type and size as well as the pollutant removal efficiencies to be achieved. The location of the site where the BMP(s) are to be constructed shall be described, including the size of the drainage area to be treated and percentage and type of existing built upon area. The application must also include the pounds of total phosphorus being mitigated for and the pounds of total phosphorus reduced with the retrofit BMP(s). A legally valid instrument shall be submitted with the application to demonstrate that the applicant has land rights to perform the BMP retrofit on the property.
 - (3) The criteria for approval of off-site total phosphorus mitigation by the stormwater administrator are as follows:
 - a. BMP(s) must be constructed in accordance with 15A NCAC 2H .1008(c), as explained in the design manual.
 - b. BMP(s) must be sized for the corresponding watershed area according to the design manual.
 - c. BMP(s) must be inspected by the stormwater administrator and found to be in compliance with all approved plans and specifications prior to the release of occupancy permits for the mitigated site.
 - d. Following approval from the stormwater administrator, BMP(s) may be installed and credits obtained for pounds of total phosphorus removed that can be applied to future projects. These credits can be accumulated or "banked" for a period of time as specified by the stormwater administrator in the administrative manual.
 - e. All off-site mitigation BMPs shall be subject to the maintenance requirements as well as installation and maintenance performance securities specified in division 6.
- (d) *Criteria for total phosphorus buy-down option.*
- (1) The owner or designee of a proposed construction site that will include greater than or equal to 24 percent built upon area may "buy-down" the 70 percent phosphorus removal requirement to no less than 50 percent. On-site BMPs must be installed to remove the remaining total phosphorus load. The money shall be used by the city to construct BMP retrofit projects designed to achieve an equivalent or greater net mass removal of total phosphorus as would be achieved by removing 70 percent of the total phosphorus from the proposed site.
 - (2) The stormwater administrator shall receive, review, approve, disapprove or approve with conditions an "application for total phosphorus buy-down." the stormwater administrator shall design this application to include all pertinent information. This application shall be submitted with the stormwater management permit application and shall at a minimum contain calculations

showing the total load buy-down and all cost calculations as described in the administrative manual.

- (3) The criteria for the buy-down option are as follows:
 - a. The buy-down option shall not be approved by the stormwater administrator unless projects and/or properties are available for mitigation, including BMP construction, BMP maintenance, BMP rehabilitation and stream restoration.
 - b. There is no time constraint for the city to spend mitigation money; however, the city shall strive to spend buy-down monies in a timely and efficient manner such that a net improvement in water quality results.
 - c. All BMPs constructed by the city as part of this mitigation option shall be maintained by the jurisdiction into perpetuity.
- (4) The criteria for calculating the buy-down cost shall be provided in the administrative manual.

(Ord. No. 3764, § 3(307), 11-26-2007; Ord. No. 4752, 10-10-2011)

Sec. 18-148. - Deed recordation and indications on plat.

The approval of the stormwater management permit shall require an enforceable restriction on property usage that runs with the land, such as plat, recorded deed restrictions or protective covenants, to ensure that future development and redevelopment maintains the site consistent with the approved project plans. The location of all designated natural area for a site shall be recorded at the Mecklenburg County Register of Deeds Office as "undisturbed natural area" or "re-vegetated natural area". Streams and buffer boundaries including the delineation of each buffer zone must be specified on all surveys and record plats. The applicable operations and maintenance agreement pertaining to every structural BMP shall be referenced on the final plat and shall be recorded with the Mecklenburg County Register of Deeds Office upon final plat approval. If no subdivision plat is recorded for the site, then the operations and maintenance agreement shall be recorded with the Mecklenburg County Register of Deeds Office so as to appear in the chain of title of all subsequent purchasers under generally accepted searching principles. A copy of the recorded maintenance agreement shall be provided to the stormwater administrator within 14 days following receipt of the recorded document. A maintenance easement shall be recorded for every structural BMP to allow sufficient access for adequate maintenance. The specific recordation and deed restriction requirements as well as notes to be displayed on final plats and deeds shall be contained in the administrative manual.

(Ord. No. 3764, § 3(308), 11-26-2007; Ord. No. 4752, 10-10-2011)

Secs. 18-149—18-160. - Reserved.

DIVISION 4. - DEVELOPMENT AND REDEVELOPMENT MITIGATION

Sec. 18-161. - Mitigation payment.

- (a) *Lots less than one acre.* Development and redevelopment on a lot less than one acre in size are allowed to forego meeting the requirements of this article, except for required stream buffers, provided the city is paid a mitigation fee according to rates set forth in the administrative manual and provided such development and redevelopment are not part of a larger common plan of development or sale, even though multiple, separate or distinct activities take place at different times on different schedules.
- (b) *Transit station areas and distressed business districts.* Development and redevelopment projects within transit station areas designated by the planning director based on corridor record of decisions, council adopted station area plan or distressed business districts designated by the economic development director are allowed by right to forego meeting the requirements of this article, except for

required stream buffers and peak control and downstream analysis requirements on the increased impervious area of the project site, provided one of the following three measures are implemented on the site:

- (1) Provide 85 percent TSS removal from first inch of rainfall for entire project;
 - (2) Provide one-year, 24-hour volume control and ten-year, six-hour peak control for entire project;
or
 - (3) Pay the city a mitigation fee according to rates set forth in the administrative manual for the pre-project built upon area and any additional impervious area not to exceed five acres. New impervious area in excess of five acres must comply with this article.
- (c) *Redevelopment not within transit station areas or distressed business districts.* Projects involving redevelopment of existing built-upon-area and the cumulative addition of less than 20,000 square feet of new built-upon-area are allowed by right to forego meeting the requirements of this article, except for required stream buffers and phosphorous requirements, provided the city is paid a mitigation fee according to rates set forth in the administrative manual for the post-project built-upon-area and, if required, onsite controls are installed for stormwater quality, and detention (i.e. volume and peak control) as well as quality stream protection in accordance with the provisions of the administrative manual.

(Ord. No. 3764, § 4(401), 11-26-2007; Ord. No. 4752, 10-10-2011; Ord. No. 5339, 4-28-2014; Ord. No. [5498](#), 10-27-2014; [Ord. No. 7062, § 1, 3-14-2016](#))

Sec. 18-162. - Criteria for mitigation payment.

- (a) *Notification to stormwater administrator.* The buy-right mitigation option does not require approval by the stormwater administrator; however, notification that this right is to be exercised for a particular lot must be made prior to the issuance of any permits for the project. This notification is to be made to the stormwater administrator on a standard form provided in the administrative manual.
- (b) *Use of mitigation payment.* The city shall use the mitigation payment to install water quality enhancement measures, including but not limited to BMPs, stream restoration, natural area preservation, etc. BMP(s) installed using the mitigation payment must be constructed in accordance with 15A NCAC 2H .1008(c), as explained in the design manual. All BMPs constructed by the jurisdiction as part of this mitigation option shall be maintained by the jurisdiction into perpetuity. The city will pursue using these mitigation funds within the same watershed as the project site provided adequate resources and property are available.

(Ord. No. 3764, § 4(402), 11-26-2007)

Secs. 18-163—18-170. - Reserved.

DIVISION 5. - NATURAL AREA

Sec. 18-171. - Purpose.

Natural area provides for a reduction in the negative impacts from stormwater runoff through non-structural means. The combination of the structural BMPs described in division 3 with the non-structural natural area provisions described in this section allow the objectives of this article to be fulfilled.

(Ord. No. 3764, § 5(501), 11-26-2007)

Sec. 18-172. - General description.

Undisturbed natural area is required for all development unless mitigated. The percentage of natural area required depends on a project's built-upon area as described below. Natural area requirements can be met in stream or lake buffers, designated common areas or on individual lots for residential development (e.g., backyards, borders, etc.). Natural area requirements can be met in vegetated utility rights-of-way (including sewer, water, gas, etc.) at a ratio of one acre of right-of-way to one-fourth acre of natural area credit. Grass fields can be used to meet natural area requirements on a one-to-one ratio; however, the fields must be replanted in accordance with the tree planting provisions described in subsection 18-175(c). Natural area requirements can also be met in planting strips that are planted in trees in accordance with the city's tree ordinance, this article or other tree planting requirements for road rights-of-way at a ratio of one acre of planting strip to three-fourth acre of natural area credit. Natural area is preferred where it will provide maximum water quality benefit (i.e. around gullies and existing drainage areas, adjacent to streams and wetlands, around structural BMPs, etc.). Cluster provisions as well as tree and S.W.I.M. buffer ordinance incentives currently contained in the city's ordinances will continue to apply in the area designated to meet this natural area requirement.

(Ord. No. 3764, § 5(502), 11-26-2007)

Sec. 18-173. - Natural area criteria.

Natural Area requirements apply to projects as described below.

- (1) *Less than 24 percent built-upon area.* A project with less than 24 percent built-upon area shall include as natural area within the boundaries of the project a minimum of 25 percent of the project area.
- (2) *Greater than or equal to 24 percent and less than 50 percent built-upon area.* A project with greater than or equal to 24 percent and less than 50 percent built-upon area shall include as natural area within the boundaries of the project a minimum of 17.5 percent of the project area.
- (3) *Greater than or equal to 50 percent built-upon area.* A project with greater than or equal to 50 percent built-upon area shall include as natural area space within the boundaries of the project a minimum of ten percent of the project area.
- (4) *I-1 and I-2 development and redevelopment projects.* I-1 and I-2 zoned developments are exempt from the open space requirement in the Central and Western Catawba Districts.

(Ord. No. 3764, § 5(503), 11-26-2007)

Editor's note— Ord. No. 3764, § 5(503), adopted November 26, 2007, enacted provisions intended for use as subsections (A)—(D). To preserve the style of this Code, and at the discretion of the editor, said provisions have been redesignated as subsections (1)—(4).

Sec. 18-174. - Natural area designation.

For natural area areas that have remained undisturbed, the location of this area shall be recorded at the register of deeds office as "undisturbed natural area." For natural area areas that have been disturbed and revegetated, the location of this area shall be recorded at the register of deeds office as "revegetated natural area." The future disturbance of these areas is prohibited except for greenway trails with unlimited public access, private trails provided they are composed of pervious materials and comply with the S.W.I.M. stream buffer requirements, Charlotte-Mecklenburg Utility lines and channel work/maintenance activities by Charlotte-Mecklenburg stormwater services. Other utility work may be allowed in the natural area areas provided it will not result in loss of natural area as approved by the city.

(Ord. No. 3764, § 5(504), 11-26-2007)

Sec. 18-175. - Natural area mitigation.

- (a) *Purpose.* The purpose of this mitigation is to reduce the cost of complying with the natural area requirement while ensuring the reduction of pollution loads and achievement of the article objectives.
- (b) *General description.* Approved disturbance to the natural area described in section 18-173 must be off-set by an allowable form of mitigation, including on-site and off-site mitigation as well as through payment-in-lieu.
- (c) *Natural area mitigation criteria.*
 - (1) *On-site mitigation.* On-site mitigation shall allow the disturbance of designated natural area on a project with the fulfillment of the following criteria on the project site:
 - a. Establishment of a minimum of six inches of top soil to the disturbed natural area following the completion of construction activities. This material may be obtained from on-site when available.
 - b. Planting of a minimum of 36 trees per acre of natural area as follows:
 - 1. Trees shall have a minimum caliper of one and one-half inches.
 - 2. Trees shall be of a quality set forth by the American Standard for Nursery Stock and will be selected from a list of acceptable native species for planting in natural area established by the jurisdiction.
 - 3. Planted trees shall contain a mix of at least three different species in roughly equal proportions and be "large mature shade tree species" as defined by the city.
 - 4. Trees shall be planted in accordance with specifications provided by the city.
 - 5. Trees shall be warranted for a minimum of two years following planting and any dead or diseased trees must be replaced.
 - c. The area around and between trees must be stabilized using an approved vegetative ground cover and mulch.
 - d. The slope of any graded or disturbed area that is dedicated for natural area can not exceed 3 to 1.
 - e. The flow of water across the natural area must be controlled to prevent soil erosion or mulch disturbance.
 - (2) *Off-site mitigation.* The city shall allow natural area disturbance and off-site mitigation through the acceptance for ownership or conservation easement properties for the protection of natural area. This off-site mitigation shall be located in the same delineated watershed as the project site. There are 20 delineated watershed districts used for mitigation purposes as follows: Sugar/Irwin, Little Sugar/Briar, McMullen, McAlpine, Four Mile, Six Mile, Stevens/Goose, Clear, McKee, Reedy, Back, Mallard, Clarks, Rocky River, McDowell, Gar, Long, Paw, Steele, Beaver Dam, and Stowe Branch. In the event property for purchase cannot be located within the same watershed district, the city shall designate an alternate watershed where there will be a net improvement in water quality protection such as designated impaired watersheds.
 - (3) *Payment in lieu of natural area dedication.* Payment in lieu of natural area dedication is only allowed for commercial development and multi-family development projects that are in excess of 50 percent built upon area. Payment in lieu shall only be allowed to the extent an approved disturbance cannot be offset by on-site mitigation as determined by the stormwater administrator. The following criteria shall be fulfilled for the payment in lieu option:
 - a. A fee shall be paid to the city where the property is located or its designee based on the following formula: $1.25 \times$ (appraised value of subject property including intended use without improvements). The appraised value of the subject property shall be determined by a licensed, independent real estate appraiser retained by the developer or owner. The

jurisdiction may accept the appraised value or at its discretion obtain its own appraisal. In the event the parties cannot agree on the appraised value, the two appraised values shall be averaged together to determine the final appraised value to be used in the formula above.

- b. Payment shall be accepted by the city or its designee prior to land disturbing activities.
 - c. The city shall use the payment-in-lieu to purchase natural area in the same delineated watershed as the property to be disturbed. The 20 delineated watershed districts used for mitigation purposes are described in subsection (c)(2). As an option, the city may elect to use up to ten percent of the fee to purchase and plant trees within the city.
- (d) *Approval criteria for natural area mitigation.*
- (1) *Application for natural area mitigation.* The stormwater administrator shall receive, review, approve, disapprove or approve with conditions an "application for natural area mitigation." The stormwater administrator shall design this application to include all pertinent information, including at a minimum a "mitigation plan" describing the desired mitigation option as discussed in previous sections. An application for on-site mitigation shall show the location of the restored natural area on the property and the location, type and size of all trees and ground cover to be planted as well as contain a warranty statement for the trees. An off-site mitigation application shall show the location and description including acreage, etc. of the property to be used for mitigation and contain a legally valid instrument demonstrating that the applicant has legal title to the property for transfer to the city a payment in lieu application shall at a minimum contain the location and description of the site to be mitigated and an approved appraisal by a licensed, independent real estate appraiser.
 - (2) *Pre-approved natural area mitigation.* The following is pre-approved for on-site mitigation and does not require the submittal of an application to the stormwater administrator; however, these mitigation areas shall be described on the stormwater management permit application:

Residential, commercial and multifamily uses: Forty percent of the required natural area as described in section 18-173 is pre-approved for on-site mitigation. Other forms of mitigation as described above must receive approval from the stormwater administrator.
- (e) *Natural area designation.* All designated natural area areas included as part of an approved mitigation must be recorded at the register of deeds office. For off-site mitigation and payment in lieu where natural area remains undisturbed, the location of this area shall be recorded at the register of deeds office as "undisturbed natural area." For natural area areas that have been disturbed and revegetated, the location of this area shall be recorded at the register of deeds office as "revegetated natural area." The future disturbance of these areas shall be in accordance with ordinance requirements, which allow for disturbances associated with the installation of greenway trails with unlimited public access, private trails provided they are composed of pervious materials and comply with S.W.I.M. stream buffer requirements, Charlotte-Mecklenburg Utility lines and channel work/maintenance activities by Charlotte-Mecklenburg stormwater services. Other utility work may be allowed in the natural area provided it will not result in loss of natural area as approved by the city.

(Ord. No. 3764, § 5(505), 11-26-2007)

Secs. 18-176—18-190. - Reserved.

DIVISION 6. - MAINTENANCE

Sec. 18-191. - Dedication of BMPs, facilities and improvements.

- (a) *Single-family residential BMPs accepted for maintenance.* The city shall accept maintenance responsibility (as specified in the administrative manual) of structural BMPs that are installed pursuant to this article following a warranty period of two years from the date of as-built certification described in section 18-123, provided the BMP:

- (1) Only serves a single-family detached residential site or townhomes all of which have public street frontage;
- (2) Is satisfactorily maintained during the two-year warranty period by the owner or designee;
- (3) Meets all the requirements of this article and the design manual; and
- (4) Includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection, maintenance, repair or reconstruction.

The stormwater administrator must receive an application for transfer of maintenance responsibilities for the structural BMP along with the stormwater management permit application. The stormwater administrator will develop and distribute this application as a component of the administrative manual (see subsection 18-122).

- (b) *Maintenance and operation of BMPs.* The owner of a structural BMP installed pursuant to this article and not covered under subsection (a) shall maintain and operate the BMP so as to preserve and continue its function in controlling stormwater quality and quantity at the degree or amount of function for which the structural BMP was designed.
- (c) *Damage or removal of trees.* The following provisions apply to trees contained in permitted natural area areas or in BMPs that are damaged or removed:
 - (1) For trees damaged or removed due to natural disasters, the owner shall be required to replace the trees in accordance with the natural area mitigation criteria described in subsection 18-175(c)(1) within a timeframe specified by the stormwater administrator.
 - (2) For trees damaged or removed due to reasons other than subsection (c)(1), the owner shall be required to replace the trees in accordance with the natural area mitigation criteria described in subsection 18-175(c)(1) within a timeframe specified by the stormwater administrator with the following exception, the trees shall be replaced at twice the specified density. In addition, the owner may be subject to fines as described in division 7.
- (d) *Annual maintenance inspection and report.* The person responsible for maintenance of any BMP installed pursuant to this article and not covered under subsection (a) shall submit to the stormwater administrator an inspection report from a qualified registered state professional engineer or registered landscape architect performing services only in their area of competence. All inspection reports shall be on forms supplied by the stormwater administrator that are contained in the administrative manual. An original inspection report shall be provided to the stormwater administrator beginning one year from the date of as-built certification and each year thereafter on or before the anniversary date of the as-built certification.

(Ord. No. 3764, § 6(601), 11-26-2007)

Sec. 18-192. - Operation and maintenance agreement.

- (a) *General.* At the time that as-built plans are provided to the stormwater administrator as described in section 18-123 and prior to final approval of a project for compliance with this article, but in all cases prior to placing the BMPs in service, the applicant or owner of the site must execute an operation and maintenance agreement that shall be binding on all current and subsequent owners of the site, portions of the site, and lots or parcels served by the structural BMP. Failure to execute an operation and maintenance agreement within the time frame specified by the stormwater administrator may result in assessment of penalties as specified in division 7. Until the transference of all property, sites, or lots served by the structural BMP, the original owner or applicant shall have primary responsibility for carrying out the provisions of the maintenance agreement. At the discretion of the stormwater administrator, certificates of occupancy may be withheld pending receipt of an operation and maintenance agreement.

The operation and maintenance agreement shall require the owner or owners to maintain, repair and, if necessary, reconstruct the structural BMP, and shall state the terms, conditions, and schedule of

maintenance for the structural BMP. In addition, it shall grant to the city a right of entry in the event that the stormwater administrator has reason to believe it has become necessary to inspect, monitor, maintain, repair, or reconstruct the structural BMP; however, in no case shall the right of entry, of itself, confer an obligation on the city to assume responsibility for the structural BMP.

Standard operation and maintenance agreements for BMPs shall be developed by the stormwater administrator and made available in the administrative manual. The operation and maintenance agreement must be approved by the stormwater administrator prior to plan approval, and it shall be referenced on the final plat as described in section 18-148.

(b) *Special requirement for homeowners' and other associations.* For all structural BMPs required pursuant to this article not covered under subsection 18-192(a), and that are to be or are owned and maintained by a homeowners' association, property owners' association, or similar entity, the required operation and maintenance agreement shall include the provisions described in the design manual.

(Ord. No. 3764, § 6(602), 11-26-2007)

Sec. 18-193. - Inspection program.

Inspections and inspection programs by the city may be conducted or established on any reasonable basis, including but not limited to routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to, reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in BMPs; and evaluating the condition of BMPs.

If the owner or occupant of any property refuses to permit such inspection, the stormwater administrator shall proceed to obtain an administrative search warrant pursuant to G.S. 15-27.2 or its successor. No person shall obstruct, hamper or interfere with the stormwater administrator while carrying out his or her official duties.

(Ord. No. 3764, § 6(603), 11-26-2007)

Sec. 18-194. - Performance security for installation and maintenance.

The city may require the submittal of a performance security or bond with surety, cash escrow, letter of credit or other acceptable legal arrangement prior to issuance of a permit in accordance with the provisions contained in the administrative manual.

(Ord. No. 3764, § 6(604), 11-26-2007)

Sec. 18-195. - Records of installation and maintenance activities.

The owner of each structural BMP shall keep records of inspections, maintenance, and repairs for at least five years from the date of creation of the record and shall submit the same upon reasonable request to the stormwater administrator.

(Ord. No. 3764, § 6(605), 11-26-2007)

Sec. 18-196. - Maintenance easement.

Every structural BMP installed pursuant to this article shall be made accessible for adequate inspection, maintenance, reconstruction and repair by a maintenance easement, which will be shown and labeled on all plans and plats. The easement shall be recorded to provided adequate and perpetual

access and sufficient area, in favor of the city or otherwise, for inspection, maintenance, repair or reconstruction. All BMPs that are not located adjacent to a public right-of-way will require the owner to provide a 20-foot wide access easement in favor of the city that connects the BMP area to the public right-of-way. The easement shall be described on all plans and plats as follows: "The purpose of the Post Construction Controls Easement (PCCE) is to provide stormwater conveyance and for the control and treatment of stormwater runoff. Buildings or any other objects which impede stormwater flow, system performance or system maintenance are prohibited. This easement also provides for unlimited access for inspection and maintenance purposes to be performed on the BMP as required by the City of Charlotte's Stormwater Ordinance Post Construction Controls Regulations." The easement shall be recorded as described in section 18-148 and its terms shall specify who may make use of the easement and for what purposes.

(Ord. No. 3764, § 6(606), 11-26-2007)

Secs. 18-197—18-210. - Reserved.

DIVISION 7. - VIOLATIONS AND ENFORCEMENT

Sec. 18-211. - Enforcement—Inspections and investigations.

- (a) Authority to inspect and investigate. The stormwater administrator shall have the authority, upon presentation of proper credentials, to enter and inspect any land, building, structure, or premises to ensure compliance with this article, or rules or orders adopted or issued pursuant to this article, and to investigate to determine whether the activity is being conducted in accordance with this article and the approved stormwater management plan, design manual and administrative manual and whether the measures required in the plan are effective. The stormwater administrator shall also have the power to require written statements, or the filing of reports under oath as part of an investigation.
- (b) No person shall resist, delay, obstruct, hamper or interfere with the stormwater administrator while the stormwater administrator is inspecting and/or investigating or attempting to inspect and/or investigate an activity under this article. The stormwater administrator, to the extent permitted by law, may seek the issuance of a search warrant to determine compliance with this article.
- (c) Inspection and/or investigation frequency. The inspections and investigations outlined above in subsection (a) may be conducted or established on any reasonable basis, including but not limited to: routine inspections and/or investigations; random inspections and/or investigations; inspections and/or investigations based upon complaints or other notice of possible violations; and joint inspections and/or investigations with other agencies inspecting and/or investigations under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in BMPs; and evaluating the condition of BMPs.

(Ord. No. 3764, § 7(701), 11-26-2007)

Editor's note— Ord. No. 3764, § 7(701), adopted November 26, 2007, enacted provisions intended for use as subsections (A)(1)—(3). To preserve the style of this Code, and at the discretion of the editor, said provisions have been redesignated as subsections (a)—(c).

Sec. 18-212. - Violations and enforcement.

- (a) *Violation unlawful.* Any failure to comply with an applicable requirement, prohibition, standard, or limitation imposed by this article, or the terms or conditions of any permit or other development or redevelopment approval or authorization granted pursuant to this article, is unlawful and shall constitute a violation of this article.

- (b) *Responsible persons/entities.* Any person who erects, constructs, reconstructs, alters (whether actively or passively), or fails to erect, construct, reconstruct, alter, repair or maintain any structure, BMP, practice, or condition in violation of this article, as well as any person who participates in, assists, directs, creates, causes, or maintains a condition that results in or constitutes a violation of this article, or fails to take appropriate action, so that a violation of this article results or persists; or an owner, any tenant or occupant, or any other person, who has control over, or responsibility for, the use, development or redevelopment of the property on which the violation occurs shall be subject to the remedies, penalties, and/or enforcement actions in accordance with this section. For the purposes of this article, responsible person(s) shall include but not be limited to:
- (1) *Person maintaining condition resulting in or constituting violation.* Any person who participates in, assists, directs, creates, causes, or maintains a condition that constitutes a violation of this article, or fails to take appropriate action, so that a violation of this article results or persists.
 - (2) *Responsibility for land or use of land.* The owner of the land on which the violation occurs, any tenant or occupant of the property, any person who is responsible for stormwater controls or practices pursuant to a private agreement or public document, or any person, who has control over, or responsibility for, the use, development or redevelopment of the property.
- (c) *Notice of violation and order to correct.* If, through inspection and/or investigation, it is found that any building, structure, or land is in violation of this article, the stormwater administrator shall notify in writing the responsible person/entity. The notice may be served by any means authorized under G.S. 1A-1, rule 4, or other means reasonably calculated to give actual notice. The notification shall indicate the nature of the violation, contain the address or other description of the site upon which the violation occurred or is occurring, order the necessary action to abate the violation, and give a deadline for correcting the violation. The notice shall, if required, specify a date by which the responsible person/entity must comply with this article, and advise that the responsible person/entity is subject to remedies and/or penalties or that failure to correct the violation within the time specified will subject the responsible person/entity to remedies and/or penalties as described in section 18-213. In determining the measures required and the time for achieving compliance, the stormwater administrator shall take into consideration the technology and quantity of work required, and shall set reasonable and attainable time limits.

If a violation is not corrected within a reasonable period of time, as provided in the notification, the stormwater administrator may take appropriate action, as provided in section 18-213, to correct and abate the violation and to ensure compliance with this article.

- (d) *Extension of time.* A responsible person/entity who receives a notice of violation and correction order, or the owner of the land on which the violation occurs, may submit to the stormwater administrator a written request for an extension of time for correction of the violation. On determining that the request includes enough information to show that the violation cannot be corrected within the specified time limit for reasons beyond the control of the responsible person/entity requesting the extension, the stormwater administrator may extend the time limit as is reasonably necessary to allow timely correction of the violation, up to, but not exceeding 60 days. The stormwater administrator may grant 30 day extensions in addition to the foregoing extension if the violation cannot be corrected within the permitted time due to circumstances beyond the control of the responsible person/entity violating this article. The stormwater administrator may grant an extension only by written notice of extension. The notice of extension shall state the date prior to which correction must be made, after which the violator will be subject to the penalties described in the notice of violation and correction order.
- (e) *Emergency enforcement.* If a violation seriously threatens the effective enforcement of this article or poses an immediate danger to the public health, safety, or welfare or the environment, then the stormwater administrator may order the immediate cessation of a violation. Any person so ordered shall cease any violation immediately. The stormwater administrator may seek immediate enforcement, without prior written notice, through any remedy or penalty specified in section 18-213.

(Ord. No. 3764, § 7(702), 11-26-2007)

Sec. 18-213. - Remedies and penalties.

- (a) *Civil penalties.* Any person who violates any of the provisions of this article or rules or other orders adopted or issued pursuant to this article may be subject to a civil penalty. A civil penalty may be assessed from the date the violation occurs. The stormwater administrator shall determine the amount of the civil penalty and shall notify the violator of the amount of the penalty and the reason for assessing the penalty. No penalty shall be assessed until the person alleged to be in violation has been notified of the violation except as provided in subsection 18-212(d) in which case the penalty is assessed concurrently with a notice of violation. Refusal to accept the notice or failure to notify the stormwater administrator of a change of address shall not relieve the violator's obligation to comply with the article or to pay such a penalty.
- (b) *Each day a separate offense.* Each day that a violation continues shall constitute a separate and distinct violation or offense.
- (c) *Penalties assessed concurrent with notice of violation.* Penalties may be assessed concurrently with a notice of violation for any of the following, in which case the notice of violation shall also contain a statement of the civil penalties to be assessed, the time of their accrual, and the time within which they must be paid or be subject to collection as a debt:
 - (1) Failure to submit a stormwater management plan;
 - (2) Performing activities without an approved stormwater management plan;
 - (3) Obstructing, hampering or interfering with an authorized representative who is in the process of carrying out official duties;
 - (4) A repeated violation for which a notice was previously given on the same project and to the same responsible person/entity responsible for the violation;
 - (5) Willful violation of this article; and
 - (6) Failure to install or maintain best management practices per the approved plan.
- (d) *Amount of penalty.* The civil penalty for each violation of this article may be up to the maximum allowed by law. In determining the amount of the civil penalty, the stormwater administrator shall consider any relevant mitigating and aggravating factors including, but not limited to, the effect, if any: of the violation; the degree and extent of harm caused by the violation; the cost of rectifying the damage; whether the violator saved money through noncompliance; whether the violator took reasonable measures to comply with this article; whether the violation was committed willfully; whether the violator reported the violation to the stormwater administrator; and the prior record of the violator in complying or failing to comply with this article or any other post-construction ordinance or law.
- (e) *Failure to pay civil penalty assessment.* If a violator does not pay a civil penalty assessed by the stormwater administrator within 30 days after it is due, or does not request a hearing as provided in subsection (c), the stormwater administrator shall request the initiation of a civil action to recover the amount of the assessment. The civil action shall be brought in Mecklenburg County superior court or in any other court of competent jurisdiction. A civil action must be filed within three years of the date the assessment was due. An assessment that is appealed is due at the conclusion of the administrative and judicial review of the assessment.
- (f) *Appeal of remedy or penalty.* The issuance of an order of restoration and/or notice of assessment of a civil penalty by the stormwater administrator shall entitle the responsible party or entity to an appeal before the stormwater advisory committee (SWAC) if such person submits written demand for an appeal hearing to the clerk of SWAC within 30 days of the receipt of an order of restoration and/or notice of assessment of a civil penalty. The demand for an appeal shall be accompanied by a filing fee as established by SWAC. The appeal of an order of restoration and/or notice of assessment of a civil penalty shall be conducted as described in section 18-124.
- (g) *Additional remedies.*

- (1) *Withholding of certificate of occupancy.* The stormwater administrator or other authorized agent may refuse to issue a certificate of occupancy for the building or other improvements constructed or being constructed on the site and served by the stormwater practices in question until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein.
 - (2) *Disapproval of subsequent permits and plan approvals.* As long as a violation of this article continues and remains uncorrected, the stormwater administrator or other authorized agent may withhold, and the stormwater administrator may disapprove, any request for permit or plan approval or authorization provided for by this article or the zoning, subdivision, and/or building regulations, as appropriate for the land on which the violation occurs.
 - (3) *Injunction, abatements, etc.* The stormwater administrator, with the written authorization of the city manager, may institute an action in a court of competent jurisdiction for a mandatory or prohibitory injunction and order of abatement to correct a violation of this article. Any person violating this article shall be subject to the full range of equitable remedies provided in the general statutes or at common law.
 - (4) *Correction as public health nuisance, costs as lien, etc.* If the violation is deemed dangerous or prejudicial to the public health or public safety and is within the geographic limits prescribed by G.S. 160A-193, the stormwater administrator, with the written authorization of the city manager, may cause the violation to be corrected and the costs to be assessed as a lien against the property.
 - (5) *Restoration of areas affected by failure to comply.* By issuance of an order of restoration, the stormwater administrator may require a person who engaged in a land disturbing activity and failed to comply with this article to restore the waters and land affected by such failure so as to minimize the detrimental effects of the resulting pollution. This authority is in addition to any other civil penalty or injunctive relief authorized under this article.
- (h) *Criminal penalties.* Violation of this article may be enforced as a misdemeanor subject to the maximum fine permissible under state law.

(Ord. No. 3764, § 7(703), 11-26-2007)